



Funded by the
Erasmus+ Programme
of the European Union



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMS (WP7)

**Program Evaluation for Transparency and
Recognition of Skills and Qualifications**



Funded by the
Erasmus+ Programme
of the European Union



- Prepared by
 - Hania NAKKASH, Beirut Arab University
 - Maha ABOUL ELA, Beirut Arab University
 - Abdalla EL LAKANY, Beirut Arab University

- With support from
 - Sabine GOULIN, Université de Lorraine
 - Cédric SANLIS, Université de Lorraine



OBJECTIVE OF WORK PACKAGE 7

Funded by the
Erasmus+ Programme
of the European Union



- To define a set of standards and procedures for the evaluation of the Health and Life Sciences Programs in the Lebanese Higher Education. Medical education is at the centre of this domain.
- In WP7 we proposed a set of standards for the Medical Programs in **General**, based on the investigation of the European, American and Canadian standards for recognition or accreditation of Medical Programs.



ACTIVITIES OF WORK PACKAGE 7

Funded by the
Erasmus+ Programme
of the European Union



- The activities in the current work package that led to the present draft were conducted into two main directions:
 - ❖ The review of the existing standards by the different European and other accrediting medical bodies.
 - ❖ The review of the local community needs and considering the demands and requirements of the Ministry of Higher Education in this regard.



AN OVERVIEW ON SELECTED MEDICAL, HEALTH AND LIFE SCIENCES PROGRAMS EVALUATION

Funded by the
Erasmus+ Programme
of the European Union



- The following section reflects the current standards and procedures applied for the evaluation of different Medical Programs, in Europe, USA and Canada.
- A summary of the existing standards in the Medical Programs with reference to those in Europe, USA and Canada.



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Dentistry

ADEE LEADER Programme has set the Standards for Dentistry Education.

These standards should be considered by the Schools of Dentistry for recognition

➤ The five requirement areas are:

- Vision, Mission, Goals and Objectives
- Quality Management Structures and Processes
- Educational Stakeholder Engagement
- Managing the Human Resource
- Managing the Curriculum



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Dentistry - Concluding remarks

- With respect to the literature concerned with the guidelines and standards for dental education in Europe, the following elements could be the key standards that are considered during the evaluation process:
 - The importance of the availability of nearly unified curricula for all programs to facilitate the transfer of credits.
 - The significance of ensuring the quality of dental care in practice sites.
 - The importance of disseminating quality culture at all levels at the school and at practice sites.



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Pharmacy

- A survey of quality assurance (QA) systems in European faculties of pharmacy was carried out under the patronage of the European Association of Faculties of Pharmacy PHARMINE consortium.
- A questionnaire based study on the quality criteria of the International Pharmaceutical Federation and the Accreditation Council for Pharmacy Education (USA) was sent out to European faculties.



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Pharmacy

- The QA areas surveyed were:
 - The existence of QA for education and research in the country and its model
 - Mission, planning and evaluation
 - Organization and administration
 - Curriculum
 - Students
 - Faculty Staff
 - Facilities and Resources



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Pharmacy – Concluding remarks

- The quality criteria were based on many areas for evaluation, the involvement of training is highly considered. The presence of questions in the survey related directly to the training activities, sites and periods reflected the importance of implementing the skills and competencies in this regard in the curriculum of pharmacy programs.
- Furthermore, considering credit transfer is highlighted aiming at facilitating students' mobility among European Countries.
- It is of interest to mention that, this research article and the data obtained contributed effectively as a platform for implementation of the academic standards of Pharmacy programs.



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Health and Social Sciences Programs

- The Accreditation Agency in Health and Social Sciences (AHPGS) standards which are adopted by the German Accreditation Agency in Health and Social Sciences Programmes are taken here as an example for quality management of different medical and health programs.



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Health and Social Sciences Programs

- **Summary of AHPGS Standards:**
 - Structural data of the study program
 - Modularization of the study program and exam system
 - Objectives of the study program and their rationale
 - Labour market situation and career opportunities
 - Admission requirements and rules of recognition.
 - Quality Assurance
 - Human resources, equipment and furnishings
 - Institutional Environment and structural conditions



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Health and Social Sciences Programs-Concluding Remarks

- The available literature revealed that there were many efforts done in Europe with respect to medical programs. Research articles and published materials on the web pages assisted the establishing of academic standards for the medical programs. The examples are plenty regarding the processing either through formulation of standards or performing research and joint projects toward better developing of the already settled standards.



THE SITUATION IN EUROPE

Funded by the
Erasmus+ Programme
of the European Union



➤ Health and Social Sciences Programs-Concluding Remarks

- All the initiatives are considered during the developing of the professional standards of medical programs in Europe and globally.
- The involvement of ECTS requirements in almost all European Standards revealed the significance of credit transfer as a platform for mobility and professional framework. Consideration of training as a complimentary component for didactic courses is highlighted within the standards cited in literature by the medical accreditation bodies in Europe



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Dentistry and Pharmacy Programs

- There are many accreditation organizations available with regard to dentistry and pharmacy programs. These include:
 - Commission on Dental Accreditation
 - American Accreditation Council of Pharmacy Education
 - Canadian Council for Accreditation of Pharmacy Programs



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Dentistry and Pharmacy Programs

- Investigation of the standards displayed in each program revealed that there is a great similarity between the quality criteria required for each of them.
- There were special emphasis on the **curriculum** (academic and clinical), **training hours** and **criteria for training sites**.
- It was noticed that the standards for accreditation of dentistry and pharmacy programs in Europe are in quite agreement with those reported in USA and Canada for each program respectively. Some minor differences exist, depending on the accreditation agencies in different countries based mainly on community needs, the stakeholder recommendations and national official authorities responsible for formal certification of the programs.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Medicine Programs

- The standards developed by the World Federation for Medical Education (WFME) are taken as an illustrative example. The project of defining and implementing Global Standards for medical education started in 2000 and the project was approved by the World Health Organisation (WHO) and the World Medical Association (WMA).
- Medical educators from six continents have participated in developing the global standards. These standards are being adopted in different parts of the world including the Eastern Mediterranean, Southeast Asia, Western Pacific region and Latin America.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Medicine Programs

- WHO/WFME Guidelines for Accreditation of Basic Medical Education were available in the year 2005.
- WFME standards are not defined to assess only graduates' competencies, but to organize programs and educational centres at schools of medicine and other educational institutes.
- Assessing an institution and its program against the standards means ensuring: educational needs, social needs, professional needs, regulatory needs.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Medicine Programs

- For the standards in Basic medical education, the areas are:
 - mission and Outcomes
 - educational program
 - assessment of students; Students
 - academies staff/faculty
 - educational recourses
 - program evaluation
 - governance and administration and the continues renewal .



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Medicine Programs – Concluding Remarks

- Based on the accumulated information collected at the WFME office, more than 500 medical schools in the world have now used the WFME standards as basis for institutional self-evaluation studies, peer reviews and other types of program development, and about 100 countries are using the standards either directly or as a template for national standards in accreditation or other types of recognition of programs.
- The following points deserve emphasis as reported in literature:
- The social accountability of medical educational must be in all accreditation process at all levels.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Medicine Programs – Concluding Remarks

- The new WHO/WFME strategic partnership, to improve medical education, will have a central role in the reform processes and in promotion of efficient and transparent national accreditation system worldwide.
- Standards should be concerned with broad categories of the content, process, educational environment and outcome of medical education.
- Compliance with standards must be a matter for each community, specific issues relevant to institutional and regional policy (The medical sciences schools should follow the motto “think globally and act locally”).



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Medicine Programs – Concluding Remarks

- The WFME Standards will encourage medical sciences schools to develop an integrated program in the theory and practice – of the bio- medical, clinical, behavioural and social sciences, including medical ethics, medical psychology, medical sociology and public health.
- Referring to medicine programs accreditation bodies, revealed that WFME is the only organisation that can accredit different international programs based on its standards that focus mainly on quality education that reflects good practice. The standards of WFME can be applicable globally regardless of country specifications. Therefore many international programs adopt its standards preparing themselves for being recognized by WFME.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs

- Two kind of programs are considered in the health sciences domain; physiotherapy and nursing. For the Physiotherapy programs two evaluation set of standards are overviewed:
 - The World Federation for Physical Therapy (WCPT)
 - The Commission on Accreditation in Physical Therapy Education (CAPTE).



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



- **Health Sciences Programs - World Federation for Physical Therapy**
- WCPT has defined a set of educational standards and some accreditation/recognition processes. It aims at improving the quality of university education in the domain of physical therapy and offers evaluation and accreditation at the international level.
- Guidelines for educational and accreditation purposes have been defined for different levels.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - World Federation for Physical Therapy

- WCPT recognizes two major components for a physical therapist education program:
 - The university based components
 - The clinical education components



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - World Federation for Physical Therapy

- WCPT standards incorporate specific criteria for:
 - The academic environment
 - Curriculum plan, evaluation, content and outcomes
 - Institution and programme resources
 - Other resources



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - Commission on Accreditation in Physical Therapy Education

CAPTE serves the public by establishing and applying standards that ensure quality and continuous improvement in the professional preparation of physical therapists and physical therapist assistants. The applied standards reflect the evolving nature of education, research and practice.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - Commission on Accreditation in Physical Therapy Education- Standards

Standard 1 The program meets graduate achievement measures and program outcomes related to its mission and goals.

Standard 2 The program is engaged in effective, on-going, formal, comprehensive processes for self-assessment and planning for the purpose of program improvement

Standard 3 The institution and program operate with integrity



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - Commission on Accreditation in Physical Therapy Education- Standards

Standard 4 The program faculty are qualified for their roles and effective in carrying out their responsibilities

Standard 5 The program recruits, admits and graduates students consistent with the missions and goals of the institution and the program and consistent with societal needs for physical therapy services for a diverse population



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - Commission on Accreditation in Physical Therapy Education- Standards

Standard 6 The program has a comprehensive curriculum plan

Standard 7 The curriculum includes content, learning experiences, and student testing and evaluation processes designed to prepare students to achieve educational outcomes required for initial practice in physical therapy and for lifelong learning necessary for functioning within an ever-changing health care environment



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs - Commission on Accreditation in Physical Therapy Education- Standards

Standard 8 The program resources are sufficient to meet the current and projected needs of the program



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Health Sciences Programs – Concluding Remarks

- Referring to literature and after investigating the quality criteria of Physical Therapy program; it was found that there are almost identical core standards of the different accrediting bodies particularly the professional standards with emphasis on education and research.
- The clinical curriculum component percentage is a matter of quality with regard to the reflected specific competencies that will be acquired by the graduates. A balance is sought between clinical and class-based education.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Nursing Programs

Global standards for initial education of nurses and midwives

- According the World Health Organization - Human Resources for Health - (WHO, 2009), several reasons are behind the need for global standards for education of health professionals. Three are enumerated:
 - The increasing complexity in health-care provision
 - The increasing number of health professionals
 - The need to assure more equitable access to health care.

The process followed to define a set of global standards is defined in (WHO, 2009).



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Nursing Programs- Global standards for initial education of nurses and midwives standards:

1. Programme Graduates	1.1. Outcomes 1.2. Programme graduate attributes
2. Programme Development/Revision	2.1. Governance 2.2. Accreditation 2.3. Infrastructure 2.4. Partnerships
3. Programme Curriculum	3.1. Curriculum design 3.2. Core curriculum 3.3. Curriculum partnerships 3.4. Assessment of students
4. Faculty	4.1. Academic faculty 4.2. Clinical faculty 4.3. Professional development of faculty
5. Programme Admission	5.1. Admission policy and selection 5.2. Student type and intake



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Nursing Programs

Canadian Accreditation of Schools of Nursing (CASN)

- The CASN standards are divided into two sets:
 - One applies to the school of nursing itself, referred to as the educational unit
 - The other applies to the nursing education program.
- In addition, the program provides two accreditation paths: path A is for new programs or new collaborations, whereas path B is for existing programs.
- Both use the same standards but a path A review is more formative, and the school must undergo a path B review within two years of the first graduates.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Nursing Programs

Canadian Accreditation of Schools of Nursing (CASN)

- The standards for each nursing education program are four: program framework, knowledge-based practice, professional growth and evaluation.
- Each nursing program is expected to reflect the mission, philosophy, and goals of the educational unit. These should be manifested in a program curriculum that facilitates the development progressively of professional growth in its learners.



THE SITUATION IN THE USA AND CANADA

Funded by the
Erasmus+ Programme
of the European Union



➤ Nursing Programs – Concluding Remarks

- It can be concluded that nursing programs, world-wide, need continuous development of the standards to cope with the variations of Degree's requirements which are different from one country to the other.
- Optimization of the standards with emphasis on good practice assists improving quality education and practice. Further studies are required at both national and international levels with regard to the academic standards and quality criteria of nursing programs. Further collaboration between the concerned parties including stakeholders will enhance better situations of nurses in the health care system.



OUTCOMES OF LITERATURE REVIEW

Funded by the
Erasmus+ Programme
of the European Union



- The standards defined by different agencies for different programs in different contexts share common elements. To our opinion this is naturally due to the fact that the object of evaluation, i.e. an academic program, has the same facets and properties independently of the program title and its context.
- The core standards defined in work package 5 independently of the domain, cover well the domain of health and life sciences. Shaping those standards allows to have a perfect fit with the domain.
- In most of the reviewed standards, the role of professional associations seems to be crucial. The role of professional associations in the definition and review of the standards needs to be reinforced in Lebanon.



OUTCOMES OF LITERATURE REVIEW

Funded by the
Erasmus+ Programme
of the European Union



- The professional dimension is strongly present in the standards of health and life sciences programs at different levels: practical or clinical education and training, clinical educators, involvement in the curriculum design, etc. This dimension needs to be clearly identified in the domain specific to the standards defined in the project.
- The universal or global dimension of the standards in this domain is also very visible and is related to the domain itself: Medicine, Pharmacy, Nursing, Physical Therapy and other programs are often global despite the specific aspects related to the corresponding professions organisation in each context.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



➤ Based on the review presented, the proposed academic standards for work package 7 as depicted in TLQAA+ project are defined in the following:

1- Mission, Goals and Governance

a. The program has clearly defined, comprehensive mission that include measurable program goals.

b. The goals and mission must be revised regularly while assuring the participation of all stakeholders in the revision process.

c. The program's mission and goals are consistent with mission of the faculty and the University including, where applicable, contribution to strategic initiatives.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



d. The program has an organizational structure that supports the achievement of its mission, and the success of its students, faculty and staff.

e. The program needs to be clearly focused on the delivery of quality health and life sciences education and practice.

f. The program has to include aspects of global health.

g. The program describes lifelong learning which refers to continuing education in the knowledge and skills of health care practice.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



2- Curriculum

- a. Program provides broad, well-integrated knowledge of the discipline, is responsive to changes in the field, and exhibits a curricular design that ensures graduates demonstrate disciplinary knowledge appropriate to their degree.
- b. The academic programme has specific learning outcomes that are designed to meet the program's intended purpose.
 - Learning outcomes are appropriate for the degree designation (i.e., associate degree vs. bachelor's degree vs. master's degree vs. doctoral degree or the level in the LQF when applicable).
 - Course requirements and delivery mechanisms provide sufficient opportunities for students to meet learning outcomes.
 - The program learning outcomes address the major issues and concerns in the discipline or professional area.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



- c. The learning outcomes defined for the courses build together the program learning outcomes.
- d. The program curriculum shall be aligned with the Lebanese Qualifications Framework when applicable.
- e. The program identifies the future roles of the graduates according to each discipline as health care providers and offers appropriate foundation for future career in the corresponding discipline.
- f. The curriculum involves the health needs of the community, health care delivery system and other aspects of social commitment.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



g. The curriculum considers ethical values and community needs, clinical/pharmaceutical research according to each domain.

h. The study plan must be descriptive and properly designed. The program must show the profiling of the medical or health graduate according to each discipline.

i. The curriculum must show a good balance between courses and practice or clinical hours according to each discipline and level of study.

j. The curriculum must include courses in the biological sciences, health sciences, health ethics, communication, management of time, management of conflict, and other transversal skills according to each discipline and level of study.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



3- Student Academic and Support Services

a. The institution provides student administrative services according to established and publicly declared policies in the following areas: Recruitment, Admission, Financial aid, Scholarship applications, Transfer credit and prior learning evaluation, and Student records management.

b. The process for the evaluation and recognition of prior learning shall be documented and public.

c. The institution provides student support services, including:

i. Advising and assessment as needed



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



- ii. Advising and assessment for credit transfer and recognition of prior learning
- iii. Academic support for students with disabilities and other learning needs
- iv. Physical or mental health counselling
- v. Orientation services
- vi. Career services.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



- d. The program has in place remedies, where necessary, to ensure student progression and completion.
- e. The program routinely evaluates the effectiveness of its support services including advising.
- f. Based on the evaluation results, the Program makes appropriate adjustments necessary to support student achievement.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



4- Assessment and Student Success

- a. The program has an appropriate number of students to ensure viability.
- b. The retention rate is sufficiently high to ensure viable completion numbers.
- c. The program shows a reasonable rate of completion.
- d. The program assesses and evaluates student achievement of the Program learning outcomes rigorously through direct and indirect methods.
- e. Formative and summative assessments inform faculty members and students of student progress in the programme. Assessment results are communicated in ways that enable improvements.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



5- Faculty

- a. The number, qualifications, and credentials of core faculty members are adequate.
- b. The number, qualifications, experiences of clinical or practitioners associated faculty members are adequate.
- c. The interaction and cooperation between core faculty members and clinical and practitioners associated faculty members are well defined and efficient.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



d. Faculty resources are sufficient to meet the teaching, scholarship, service, and advising needs of the program.

e. Faculty development is assured as appropriate to the teaching in the discipline and advancing disciplinary knowledge.

f. The program regularly evaluates the effectiveness of faculty with respect to departmental, college, and institutional criteria. The evaluation includes teaching effectiveness, evidence of research, and service to the institution. The evaluation also includes scholarly activity, grants and awards.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



6- Budget, Resources, and Facilities

a. The program's allocated resources are sufficient to support its goals and objectives. The resources include:

- Financial resources
- Human resources/Physical facilities (e.g., classrooms, laboratories) under the disposal of the student population and the programmes offered. Library resources and services support Technology resources to advance teaching and learning

b. The clinical or other practical infrastructures are available and sufficient for the clinical and/or practical parts of the program.

c. Policies are in place to ensure the safety and security of students, faculty and staff.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



7- Continuous Improvement

- a. The program engages in periodic self-review, has established evaluation procedures, and shows evidence of improvements based on these processes.
- b. Multiple direct and indirect assessments are used to inform continuous programme improvement.
 - Assessments are linked to the program's mission and goals
 - Assessments include student performance in courses, labs and clinical experiences, and alumni performance in the workforce



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



- Faculty members are involved in defining the expected outcomes and in determining whether these outcomes are achieved
 - Assessments provide faculty with the opportunity to examine student performance in the context of progressively more challenging problems, projects, and standards for performance
- c. The programme engages in periodic self-evaluation, has established evaluation procedures, and shows evidence of improvements based on these processes.



STANDARDS FOR HEALTH AND LIFE SCIENCES PROGRAMMES

Funded by the
Erasmus+ Programme
of the European Union



- d. Self-evaluation cover both academic and clinical/practical parts of the programme.
- e. Faculty and administrators regularly review the effectiveness of the assessment system.
- f. Assessment results are available to stakeholders, including faculty members and students



SECTORAL QUALIFICATIONS FRAMEWORK

Funded by the
Erasmus+ Programme
of the European Union



In work package 1 of the project, the LQF developed within the ETF project has been evaluated and adopted after minor changes.

The descriptors of levels 6 and 7 are shaped to the nursing domain.

The following table provides these descriptors for knowledge, know-how and social skills after recalling the general descriptor of the LQF



SECTORAL QUALIFICATIONS FRAMEWORK

Funded by the
Erasmus+ Programme
of the European Union



<p>Knowledge</p>	<p>Has in-depth knowledge in a sphere of work or study requiring a critical understanding of theories and principles applicable to a range of professional situations and diverse studies.</p>	<p>Has highly specialised knowledge, some of which are in the vanguard of knowledge in a sphere of work or study, based on original ideas and/or research. Has critical awareness of knowledge in a certain field and at the interface of several fields.</p>
<p>Knowledge</p>	<p>Has an understanding of relevant biological, social and related sciences as they apply to nursing practice. Integrate knowledge and has an understanding of a systematic approach to care and a specific range of nursing interventions and of the concepts and methods that pertain to clinical practice skills and that are essential for effective and safe nursing practice. Critically analyse and evaluate relevant knowledge in nursing sciences and health promotion.</p>	<p>Demonstrate the integration of knowledge from a broad range of disciplines and of major research methodologies relevant to and allowing the development of the nursing domain. Demonstrate a knowledge base necessary to exercise higher levels of judgement and decision making within nursing practices. Generate nursing knowledge and innovative clinical practices.</p>



SECTORAL QUALIFICATIONS FRAMEWORK

Funded by the
Erasmus+ Programme
of the European Union



Know-how

Can devise technical, methodological and conceptual solutions and demonstrate expertise and innovative ability to resolve complex and unpredictable problems in a specialist sphere of work or study, using advanced skills.

Can solve problems relating to research and innovation, to develop new knowledge and new procedures by mobilising highly-specialised skills.

Can integrate knowledge from different areas and communicate the knowledge and the results of activities with specialists and non-specialists

Know-how

Assist individual, families and groups in achieving optimum health, independence, recovery or a peaceful death in a professional caring manner.
Provide and manage direct practical

Demonstrate expert skills in providing care within practice framework and multidisciplinary team.

Conduct a comprehensive health needs assessment as the basis of independent nursing practice within a



SECTORAL QUALIFICATIONS FRAMEWORK

Funded by the
Erasmus+ Programme
of the European Union



Social skills

Can implement unpredictable complex technical or professional activities or projects, including responsibilities in terms of taking decisions in professional or study contexts requiring one to adapt/adaptation to new technologies and methods and to new forms of organisation.
Can take on responsibilities in connection with individual and collective professional development.

Can act on complex, unpredictable professional or study contexts that require new strategic approaches.
Can make judgements and exercise responsibilities, considering the social and ethical aspects associated with the decisions.
Can take on responsibilities to contribute to knowledge and professional practices and/or to revise

Establish and maintain therapeutic interpersonal relationships with patients and communities.
Effectively manage the nursing care of clients.
Demonstrate the ability to team work.
Educate individuals and groups to maintain and promote health care.
Respect the codes and ethics of the nursing practices.

Demonstrate autonomy, accountability, authority, leadership and responsibility in nursing.
Actively contribute to the nursing knowledge of the nursing team and generate and transmit innovative practices.
Review critically the working of teams and demonstrate skills in management of conflict.
Assure the respect of and develop the codes and ethics of nursing practices.



GENERAL MEDICAL DOMAIN

Funded by the
Erasmus+ Programme
of the European Union



- A medical programme framework identifies six competencies in medical education. These are:
- Medical knowledge
- Patient care
- Interpersonal and communication skills
- Practice-based learning and improvement
- Systems-based practice
- Professionalism



COMPETENCIES ARE GROUPED IN THE SECTORAL LQF AT LEVEL 8

Funded by the
Erasmus+ Programme
of the European Union



Knowledge

- Has knowledge at the most advanced frontier of a sphere of work or study and at the interface of several fields.
- Demonstrate an understanding of the physical, psychological, pharmacological, and ethical matters that impact patient care and show the ability to discuss the structure and function of the human body at the whole body, organ system, organ, tissue, cellular and molecular levels.
- Demonstrate an understanding and the ability to use the most advanced knowledge in genetics, biochemical basis of cellular function, immunology, epidemiology, statistics.
- Recognize normal psychological development.
- Identify main pathological mechanisms.
- Analyse the principles of both curative and palliative therapeutics necessary to provide the best therapeutic options.
- Discuss the role of health care policies in improving patient care, including non-biological determinants of health, economic, psychological, social and cultural factors.



COMPETENCIES ARE GROUPED IN THE SECTORAL LQF AT LEVEL 8

Funded by the
Erasmus+ Programme
of the European Union



Know-how

- Can deal with critical problems of research and/or innovation and explore new spheres, extend and redefine existing knowledge or professional practices by mobilising the most advanced and most specialised skills and techniques, including in relation to synthesis and evaluation.
- Perform a complete and focused physical exam taking into consideration the patient context by gathering and analysing the patient's information. Apply the most advanced clinical, laboratory, imaging, pathology and pathophysiological principles and exams to diseases.
- Develop differential diagnosis and design an optimal treatment in clinical medicine and patient care.
- Plan the patient's investigations and management needs, and use information technology and other advanced resources for this purpose.
- Demonstrate understanding of the need to collaborate with others in caring for patients and appraise the need for requesting consultation with other health care professional for the well-being of the patient.
- Practice patient confidentiality



COMPETENCIES ARE GROUPED IN THE SECTORAL LQF AT LEVEL 8

Funded by the
Erasmus+ Programme
of the European Union



Social Skills

- Can demonstrate a high level of authority, innovation, autonomy, scientific or professional integrity and a sustained commitment to the production of new ideas or new processes in a sphere in the vanguard of work or study, including in relation to research.
- Apply the medical profession ethical principles and discuss the role of medical jurisprudence in health care.
- Demonstrate honesty and integrity in all interactions with patients, families, colleagues, and the healthcare team.
- Demonstrate a commitment to scientific knowledge and improvement of care quality.
- Promote access to medical care.
- Interpret information about health indicators to identify needs of communities and plan appropriate interventions.
- Analyse the organisation, financing, and delivery of health care and apply the principles of cost-effectiveness.
- Determine personal and professional conflicts of interest.



CONCLUSION

Funded by the
Erasmus+ Programme
of the European Union



This document present a bibliographical review of standards in different disciplines of the domain health and life sciences.

Based on this study, the core standards have been broken down to specific ones for this domain. Moreover, specific descriptors for nursing education in level 6, 7 and 8 have been proposed to add a sectoral dimension to the LQF



Funded by the
Erasmus+ Programme
of the European Union



THANK YOU